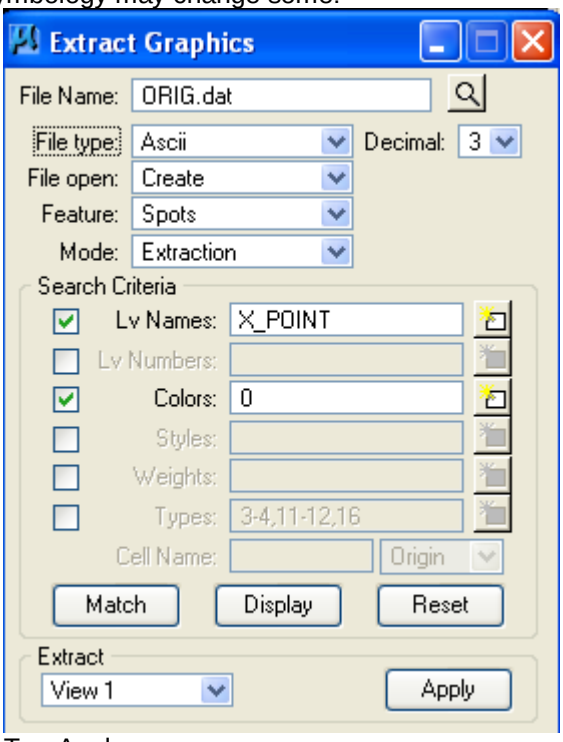
# Creating DTM's or TIN's (1-1-2012)

Data Acquisition is the preferred method for creating TIN files. Help is available under DA describing the steps involved. The steps below are becoming outdated although still used more often when photogrammetry, field, and possibly Lidar data is extracted from a 3d file to create a DTM. Currently Surfaces are stored in an external TIN file. With Microstation & GeoPak SS3, Surfaces will be an element type in Microstation (In other words, the DTM is stored in the DGN file). At this time, TIN files are required even if with version SS3.

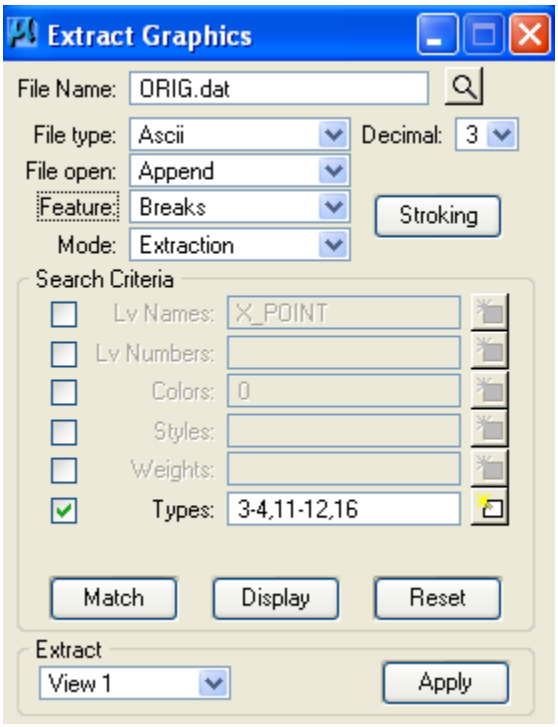
## Create DTM from 3d Spot Shot/Breakline Survey - Building .DAT & .TIN files.

1.Extract Graphics (Spot Shots) - From 3d file, set the Extract Graphics dialog as shown below, symbology may change some:



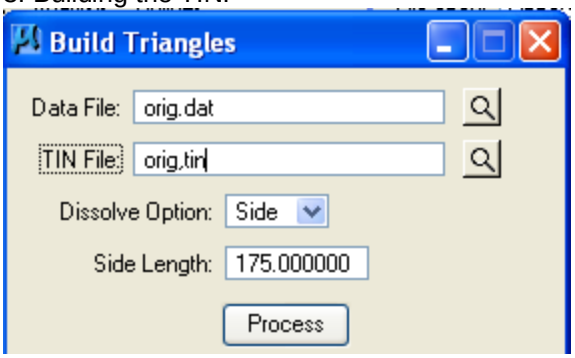

Tag Apply

2. Extract Breaklines

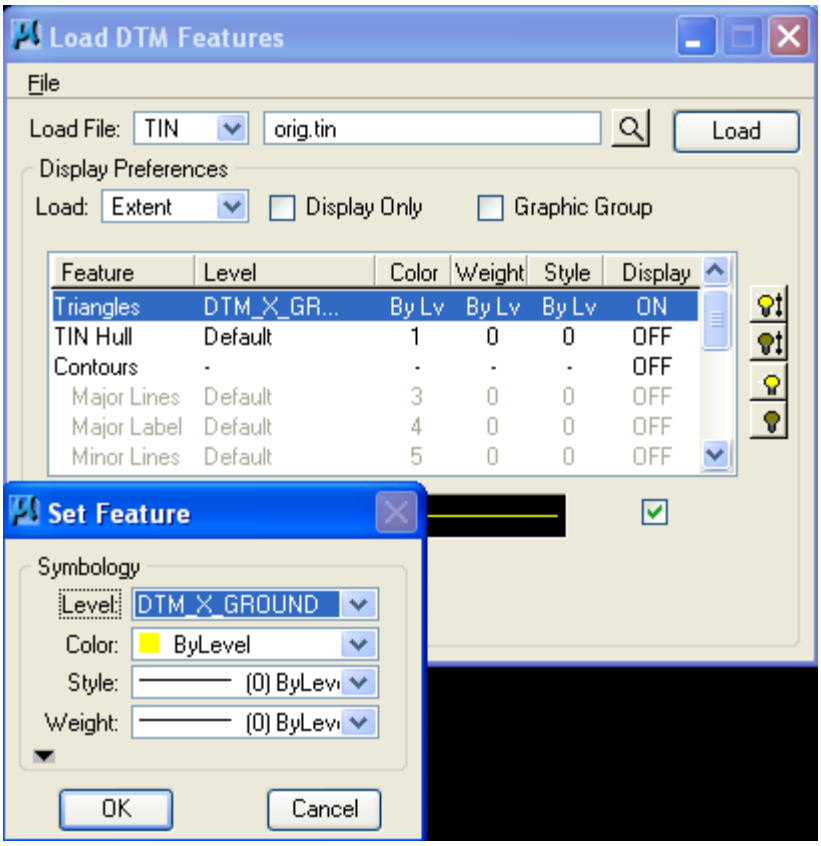



Tag Apply

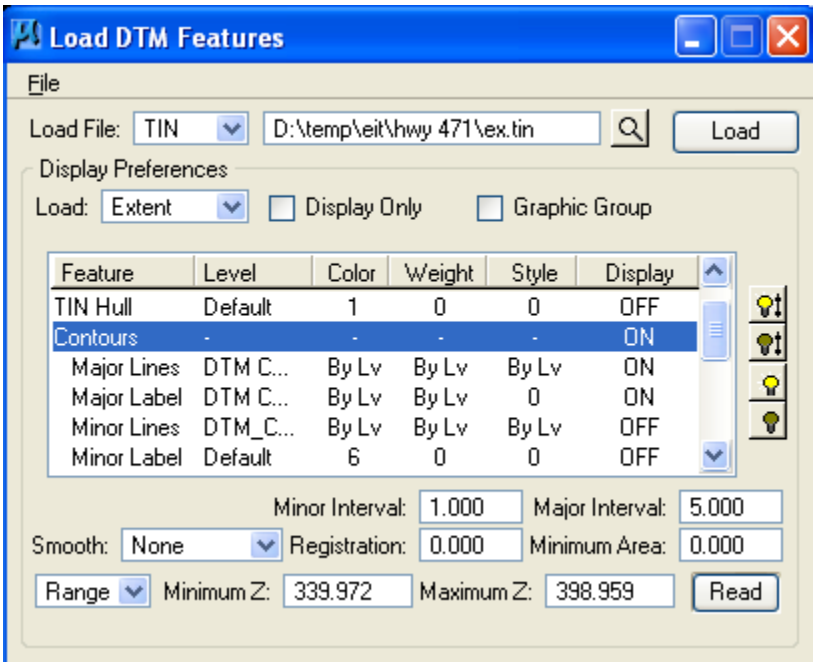
3. Building the TIN.




## Plotting a TIN in a DGN file (Load DTM Feature)

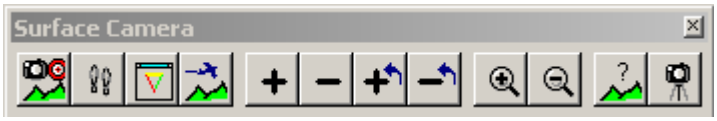



## Plotting Contours in a DGN file (Load DTM Feature)



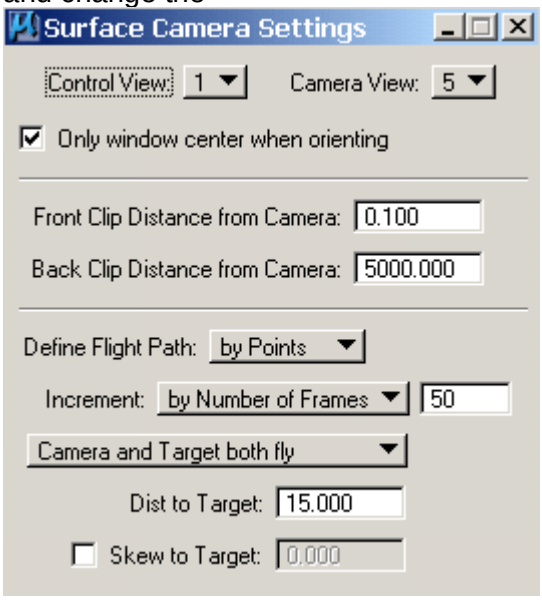
# DTM Camera

The DTM camera allows you to easily navigate your plotted DTM to check for errors and view your DTM. It makes moving around in 3d very simple. It is invoked under all available DTM pulldowns or menus and it is shown below.




1) Tag the Surface Camera Settings button. 

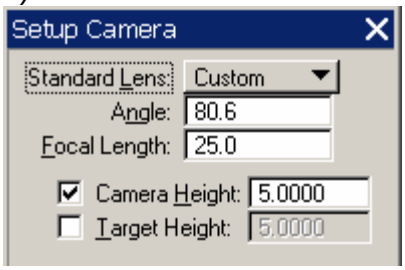
2) Set the camera settings as shown below. If needed, change the CAMERA VIEW to 5 and change the




View 1 (Top View) & View 5(ISO View) should be both open.

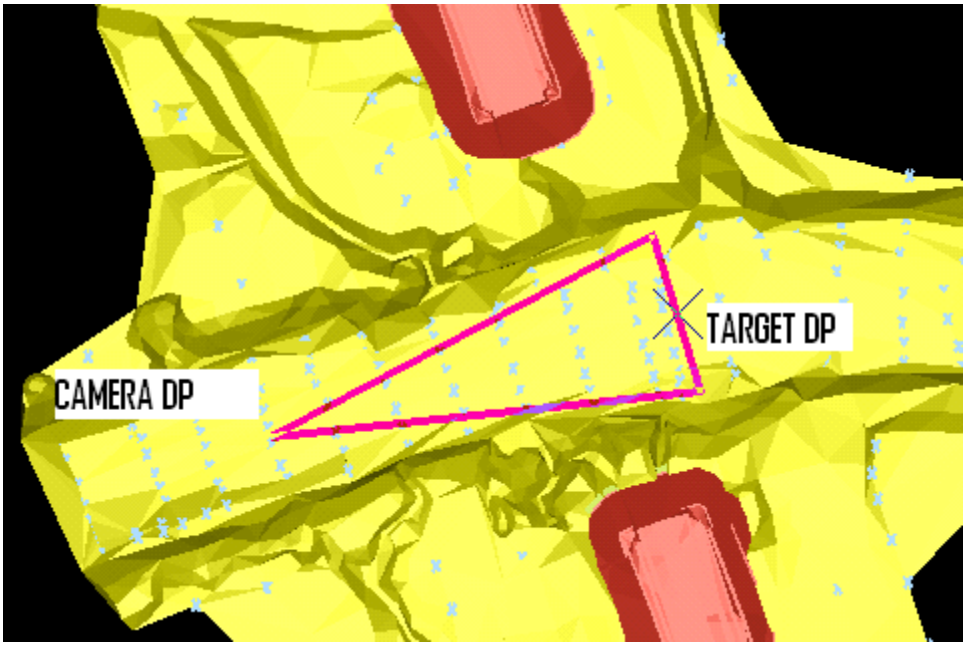
3) Tag the Locate Camera & Target button. 

a) Check the CAMERA HEIGHT box and enter 5 or 10.

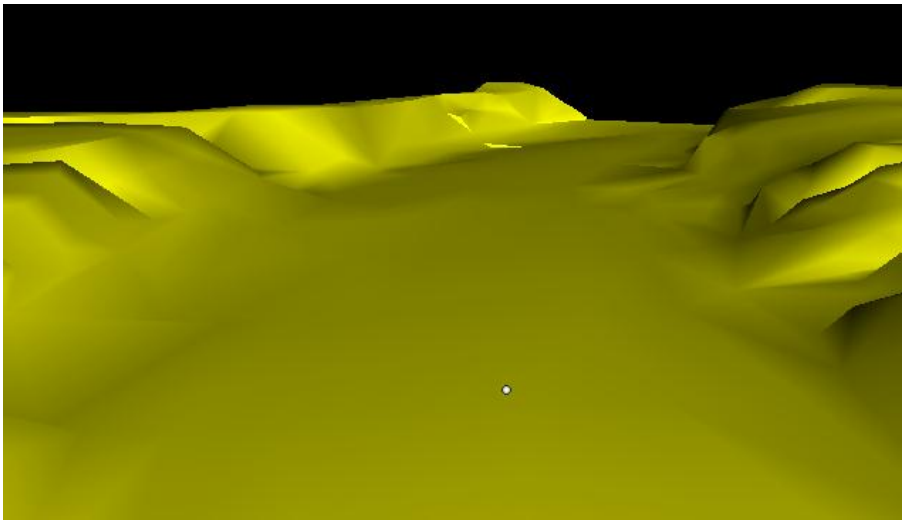



b) You'll be prompted to "SELECT ACTIVE VIEW" and you'll DP anywhere in View 5.

c) Next in View 1, Snap to the TIN elements & DP the camera location and then do the same for the target location.




View 5 should be now oriented in the direction of the camera as shown below:

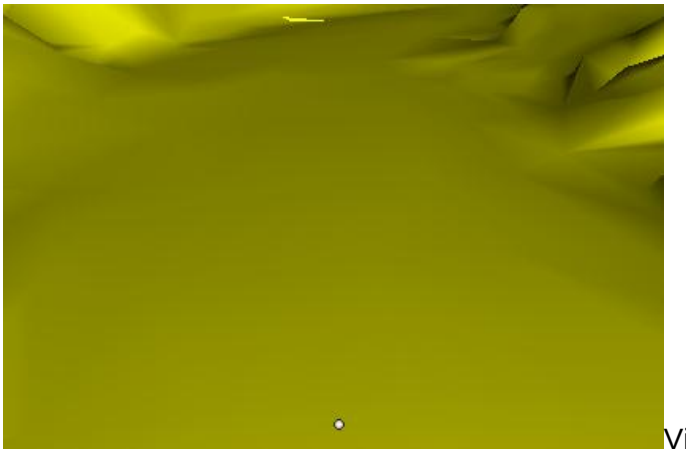


4) Tag the WALK CAMERA button. 

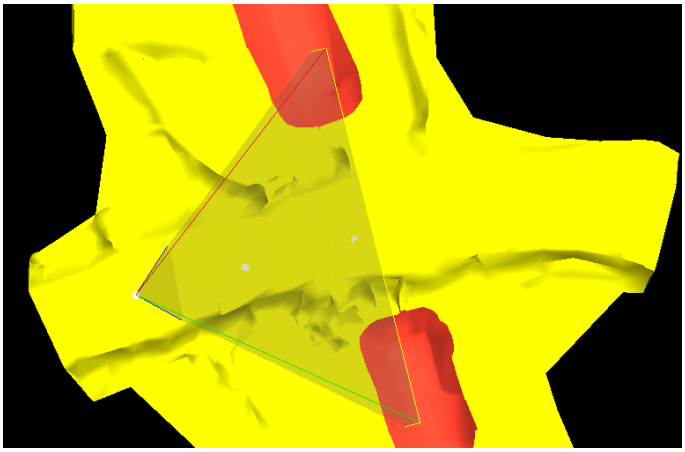
5) Make sure Camera Height is checked and set to 5 or 10 or somewhere in between. This is the height above the TIN.


DP View 5 and move your cursor in the direction you want to go. A White Dot will appear (See below) which represents the camera location. The further you move your cursor from the DOT, the faster you will move. You should also be able to see the camera in View 1 if needed

for orientation.



View 5



View 1